

SUBSTITUTE SPECIFICATIONSPECIFICATIONTITLE**"SHIMMING STRUCTURE AND METHOD FOR A MAGNETIC RESONANCE IMAGING APPARATUS"**5 BACKGROUND OF THE INVENTIONField of the Invention

The present invention relates to a method for adjusting the static magnetic field in a magnetic resonance imaging (MRI) device and a static magnetic field generating apparatus that generates a higher field strength. The present invention can be used in a C-type magnet of a magnetic resonance imaging apparatus, but is also suitable for use in other devices using an electro-magnet to generate a uniform static magnetic field, without limitation to the exemplified C-type.

Description of the Prior Art

15 In the early development of magnetic resonance imaging equipment for commercial use, the field strength of the permanent magnet was usually lower than 0.25T. In the 1990's, magnetic resonance imaging equipment for commercial use were developed that employed a permanent magnet with a field strength of 0.3T and the performance thereof was better, the cost was reasonable
20 and the structure was compact. The greater the field strength, the higher the signal-to-noise ratio, and the better the quality of the image generated by the permanent magnet magnetic resonance equipment. In recent years, the field strength of some of the permanent magnets can reach 0.35T-0.4T.

At present, certain problems exist in the manufacturing of a magnet with a
25 higher field strength: